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Federal Coal Management Report

Fiscal Year 1981

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Annual report of the Secretary of the Interior under Section 8 of the Federal Coal Leasing Amendments Act of 1976 (P.L. 94-377)

PREFACE

The Federal Coal Management Report is an annual report mandated by the Federal Coal Leasing Amendments Act of 1976. This Fiscal Year (FY) 1981 report, the fifth to be transmitted to Congress, focuses on the implementation of the Federal coal management program during FY 1981. A summary of all the major coal-related activities during FY 1981 is presented.

This report is divided into three major sections: (1) Introduction; (2) Management, Supervision, and Enforcement in FY 1981; and (3) Major Issues and Recommendations.

The Introduction briefly describes the review of the Federal coal program that has resulted in proposed changes to the coal leasing and mining supervision regulations. These changes are designed to streamline the existing procedures and to establish a more efficient leasing and management process. The FY 1982 report will fully document these changes. In addition, the Introduction summarizes the status of Federal coal lands and current leases and applications and briefly describes the Federal coal program as it operated in FY 1981. A detailed description of the coal program was presented in the FY 1979 edition.

The second section is divided into two parts -- agency responsibilities and activities, and litigation. The FY 1981 responsibilities and activities of the Bureau of Land Management, U.S. Geological Survey, Office of Surface Mining Reclamation and Enforcement, Fish and Wildlife Service, Department of Energy, and Department of Agriculture - Forest Service are presented.

The last section identifies the status of the issues and recommendations described in previous editions. As mandated, a brief description of current issues and recommendations for improving the Federal coal program is also included.

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INTRODUCTION

REVIEW OF THE FEDERAL COAL MANAGEMENT PROGRAM

The Federal coal management program combines all major Federal coal management responsibilities of the Secretary into one unified program in order to:

1. Give the Nation a greater assurance of being able to meet its national energy objectives.
2. Provide a means to promote a more desirable pattern of coal development while incorporating environmental protection measures.
3. Assure that State and local governments participate in decisions about where and when Federal coal production will take place.
4. Increase competition in the coal industry.

Several significant changes to the program were under consideration during the fiscal year. Revisions to the Federal coal management rules were initiated in FY 1981. The purpose of the revisions was to eliminate burdensome, confusing, outdated, or unneeded provisions of the existing rules for the Federal coal management program. Public and industry comments as well as the Department of the Interior (DOI) review of the existing program implementation have identified a need for the changes which are proposed. These revisions would result in:

1. An overall streamlining of leasing procedures.
2. The removal of duplicative language and requirements.
3. Additional opportunities for earlier input and consideration of State and local government, general public, and industry resource data and needs consistent with other resources.
4. A more efficient leasing and management process.
5. Clearer direction to lessees regarding operating standards.

Public comments on the draft coal rules will be solicited during the first part of FY 1982, and the new rules are scheduled to become effective in the spring of 1982.

A number of other changes have already been implemented during the first half of FY 1982. In the December 1981 DOI Appropriations Act, Congress repealed the Department of Energy's (DOE) functions relating to coal leasing. The DOE functions involving production rates, bidding systems, competition, and diligence have been assumed by the DOI. In January 1982, the Secretary announced the formation of a new agency. The Minerals Management Service was created from the Conservation Division of the U.S. Geological Survey (GS). This was done to ensure the proper and full collection of royalties from Federal and Indian leases and will place renewed emphasis on efforts to stem royalty fraud and theft.

DESCRIPTION OF THE FEDERAL COAL MANAGEMENT PROGRAM

Using the authority in the Federal Land Policy and Management Act (FLPMA) and the Federal Coal Leasing Amendments Act (FCLAA), comprehensive land-use planning for all Federal lands serves as the foundation of the Federal coal management program. The principal coal resource decision in land-use planning is to determine where coal production could occur to meet energy needs without unduly damaging agriculture, wildlife, recreation, or other resources and resource uses. These areas are identified by studying all Federal coal lands and screening those areas to determine which will be given further consideration for coal leasing.

Areas that will be given further consideration for leasing are determined using four screens. The first is the identification of coal areas that have high or moderate development potential. This determination is based on whether the coal resources are of sufficient quality or quantity to mine economically or are likely to become economically minable during the life of the land-use plans (LUP's). Second, a series of 20 unsuitability criteria, including those required by the Surface Mining Control and Reclamation Act (SMCRA), are applied to lands within the planning areas. These criteria incorporate both statutory and Departmental policy for protecting significant resources and resource uses and are designed to determine the unsuitability or acceptability of an area for coal development.

Multiple-use resource management decisions serve as the third land-use screen. The adjustments at this stage in the land-use planning process will accommodate unique site-specific resource values clearly superior to coal but which are not included in the unsuitability criteria.

In the fourth screen, qualified owners of surface estates overlying Federal coal are asked to express a preference for or against surface mining. Where a significant number of qualified surface owners in an area express a preference against surface mining, the land will only be considered for underground mining.

Once the LUP's are completed and areas acceptable for further consideration for leasing are identified, activity planning is initiated. The purpose of activity planning is to delineate and select a sufficient number of tracts for competitive lease sale in order to meet regional leasing targets. This process includes a built-in mechanism for Federal/State cooperation through a Federal/State regional coal team (RCT) in each region. See Appendix B for a map of the Federal coal regions.

The RCT is chaired by a Bureau of Land Management (BLM) representative appointed by, and responsible to, the Director of BLM. Other members of the RCT are BLM State Office representatives for each of the States located within a region (the State Director or his alternate), and the Governor or his representative from each of the States located within a

given region. The GS, Fish and Wildlife Service (FWS), Office of Surface Mining Reclamation and Enforcement (OSM), U.S. Department of Agriculture (USDA) - Forest Service (FS), DOE, appropriate State agency representatives, representatives of Indian tribes, and local government officials may serve as ex-officio team members and may participate as non-voting members in meetings of the RCT's.

The activity planning phase begins with a call for expressions of leasing interest in those areas determined acceptable for further consideration for leasing. The call for expressions from the public and the coal industry is made to obtain specific information on those areas where there is interest in Federal coal leasing. Expressions are also sought from both small coal businesses and public bodies to help identify tracts for the special set-aside programs. Information received from these expressions is merged with data developed by the DOI and serves as the basis for delineating potential lease tracts, including tracts for small businesses and public bodies.

Once delineated, the potential lease tracts are analyzed on a site-specific basis, i.e., the characteristics of each specific tract are identified and a profile is prepared for each of the tracts. The site-specific analyses (SSA's) are used by the RCT to rank the tracts. The ranking is an indication of which tracts are more suitable for development. Sufficient tracts are ranked so the total amount of coal is enough to meet the regional leasing target.

The regional leasing target is established by the Secretary of the Interior after analyzing the DOE's coal production goals and other factors, seeking public comments, and reviewing the RCT's recommendation. The leasing target is an indication of the amount of Federal coal that should be leased to meet the projected demand for reserves in the region for a given time period, taking into account that Federal coal, as well as private or State coal, will meet the total demand in the region.

After ranking, the tracts that appear to be best suited for development and that will meet the leasing target are selected by the RCT as the preferred leasing alternative. This grouping and others which encompass tonnages both smaller and greater than the leasing target are analyzed in the regional lease sale environmental impact statement (EIS). Following public review of the draft EIS (DEIS), publication of the final EIS (FEIS), a recommendation by the RCT, and consultation with the Governor of each affected State, the Secretary makes a final selection of the tracts that will be offered and adopts the schedule for the competitive sale of those tracts.

In addition to this process, the Federal coal program includes a process for circumstances where there is an urgent need for Federal coal. In designated Federal coal production regions where activity planning takes place, coal lease applications may be submitted for lands where Federal coal would be bypassed if not mined as part of an existing operation or

where there is a need for Federal coal to maintain production or to meet existing contracts. A maximum of eight years of reserves can be leased under this part of the program. Leasing under these conditions is not a substitute for the procedure required by the long-term leasing system. These emergency leases are only to satisfy immediate needs that cannot await the next scheduled regional coal lease sale.

For areas outside a Federal coal region or within an Eastern Federal coal region (outside of an activity planning area), applications for a lease will also be accepted. In these cases, the emergency leasing restrictions on the amount of reserves that can be leased do not apply.

In addition to these leasing components, management of existing leases, processing of pending preference right lease applications (PRLA's) and certain exchanges involving coal lands or bidding rights are other significant aspects of the Federal coal program. Of particular importance in managing existing leases is the requirement for diligent development. For those leases issued before the enactment of the FCLAA (August 4, 1976), development of coal in commercial quantities must occur by June 1, 1986, or the lease will be subject to cancellation. For those issued after August 4, 1976, diligent development must begin within ten years of the date of issuance. Extensions may be granted for pre-FCLAA leases if administrative actions have delayed production, if the lessee has a contract for production, or if the development involves relatively large annual production or advanced technology.

The PRLA's, which are the result of coal discovered under the prospecting permit system (which was eliminated by the FCLAA), will, under current DOI policy, be completely processed by December 1984. It must be determined that coal was discovered in commercial quantities before a lease can be issued.

Under certain conditions, coal leases or PRLA's may be exchanged for other mineral leases, bidding rights that can be used at coal lease sales, or other Federal coal leases if the leases being exchanged are located in an alluvial valley floor or if issuance of Federal coal leases by exchange has been specifically authorized by legislation. For exchanges, PRLA's and existing leases, the unsuitability criteria and other planning requirements are applied to determine whether the area covered by the application, exchange proposal, or lease is acceptable for coal development.

STATUS OF CURRENT FEDERAL COAL LANDS, LEASES, AND APPLICATIONS

Because the Federal Government owns one-third of the Nation's coal and indirectly affects the use of at least an additional 20 percent of the coal in the west, the Federal Government greatly influences the availability of coal in the U.S. [1/] Approximately 75.6 million acres of coal lands are owned and administered by the Federal Government and are located principally in the Western States. These western Federal coal lands contain as much as 60 percent of the total western coal reserve base.

In FY 1981, 94.6 million tons of coal were mined from Federal lands. This production accounted for approximately 11 percent of the total U.S. production, up from 8.6 percent in FY 1980. Total U.S. production in FY 1981 was approximately 793.5 million tons. As of September 30, 1981, there were 575 Federal coal leases in effect, of which 14 were issued in FY 1981. Four of the new leases issued in FY 1981 were processed in response to applicants that met the qualifications for competitive leasing on application. Three new Federal coal leases were processed from PRLA's. An additional seven leases were issued as a result of regional coal lease sales held in three Federal coal regions. Twelve additional tracts were sold via regional sales but were not effective leases as of September 30, 1981.

As of September 30, 1981, 167 PRLA's remained to be processed. As a matter of policy, the DOI will complete the processing of the PRLA's by December 1, 1984, coordinating it with the cycle of ongoing comprehensive land-use planning where possible.

[1/] Appendix A provides a detailed description of the total U.S. and Federal coal lands and the Federal coal leases and lease applications.

MANAGEMENT, SUPERVISION, AND ENFORCEMENT IN FY 1981

The BLM, GS, OSM, and FWS carry out a number of the requirements of the Federal coal program. Additional responsibilities relating to Federal coal are carried out by agencies other than DOI, particularly by the DOE, the FS, and the Department of Justice (DOJ).

The BLM serves as the focal point for conducting DOI's coal policy review and is responsible for assuring interagency coordination for implementing the Federal coal program. The BLM is also DOI's key point of contact for State and local governments, industry, environmental groups, and other Federal agencies concerned with the management of Federal coal. The BLM's responsibility in the Federal coal program includes preparing LUP's and, where Federal interests are not large enough to justify a LUP, a land-use analysis, both of which include surface owner consultation and application of the unsuitability criteria. The BLM also participates in selecting and recommending to the Secretary the tracts to be offered for lease, as well as preparing analyses of those tracts and regional coal lease sale EIS's. In addition, the BLM processes coal lease applications and coal exchanges, and carries out many of the actions relating to the management of existing leases.

The GS is responsible for estimating both the quantity and quality of Federal coal, delineating potential lease tracts, evaluating the economic value of coal resources for lands proposed for leasing, and providing technical information for the BLM's land-use planning activities. The GS also establishes known recoverable coal resource areas (KRCRA's), approves the formation of logical mining units (LMU's) and exploration plans, and monitors coal production from Federal leases. In addition, GS operates the National Coal Resources Data System (NCRDS), which is a computer-based information network that contains map data and coal resource figures.

The OSM regulates surface mining and the surface effects of underground mining, approves State programs, approves some exploration plans, and provides assistance to the States concerning implementation of approved State surface mining programs as well as funding mining and mineral research institutions. The OSM is also responsible for ensuring reclamation of abandoned coal mine areas. Both the OSM and the GS make recommendations to the Secretary for the approval of mining and reclamation plans which are necessary before mining can begin on a leased area.

The FWS is responsible for ensuring that fish and wildlife resources receive adequate consideration in the BLM leasing program and in the OSM's regulation and enforcement activities. This involves collection and analysis of information on fish and wildlife resources, furnishing technical assistance, and reviewing and making recommendations on proposed actions and ongoing coal development and reclamation.

The USDA, through the FS, has land management planning responsibilities for lands under its jurisdiction, although the BLM is responsible for coal leasing. In addition, the Secretary of Agriculture may recommend stipulations to be included in a lease on FS lands, must consent to the lease terms before a lease for land in a National Forest can be issued and, by regulation, must consent in the approval of mining and reclamation plans for Federal coal leases on FS lands.

During FY 1981, the DOE, under its 1977 Organization Act, was responsible for (1) fostering competition for Federal coal leases, (2) implementing alternative bidding systems for Federal coal leases, (3) establishing diligence requirements for coal development on lands under lease, and (4) setting production rates for Federal coal leases, i.e., the contribution that Federal coal will make to national coal production. The DOE was also afforded the opportunity to review the terms and conditions under which a Federal coal lease will be issued. If the Secretary of Energy disapproves the terms and conditions, they are not included in the lease.

The DOJ reviews DOI activities under the Federal coal program for their impact on competition in the coal industry.

AGENCY RESPONSIBILITIES AND ACTIVITIES

BUREAU OF LAND MANAGEMENT

The BLM continued to implement the Federal coal program during FY 1981. The BLM effort included conducting land-use and activity planning and processing applications for leasing. The BLM also drafted amendments to the Federal coal management rules. These guidelines and draft rule amendments were designed to clarify and streamline certain aspects of the Federal coal program.

Other ongoing activities included investigation of suspected coal trespass, research on rehabilitation potential of energy mineral lands, and readjusting or modifying certain leases.

Land-Use and Activity Planning

The first two major steps for coal leasing in the Federal coal program are land-use planning [2]/ by the surface management agency (See Appendix C) and activity planning guided by the RCT's. Decisions resulting from the land-use planning process identify resource uses, including lands acceptable for further consideration for leasing. The land-use planning and activity planning efforts in each Federal coal region during FY 1981 are summarized below.

Green River-Hams Fork Federal Coal Region - Regional coal leasing under the Department's new Federal coal program was initiated by the sale of six tracts in this region - three in Colorado, three in Wyoming - on January 13 and 14, 1981. Two additional tracts were offered for sale in April 1981. Other tracts selected by the previous Secretary in October 1980 will be offered in FY 1982.

A second round sale date of March 1984 has been adopted. Land-use planning is scheduled for completion in FY 1982 for the White River and Williams Fork planning units in Colorado. Coal lands in the Salt Wells, Big Sandy, Pioneer Trails, Overland, and Divide planning units in Wyoming are also undergoing land-use planning with an FY 1982 completion date.

2/ Land-use plans are generally either Management Framework Plans (MFP's) or Resource Management Plans (RMP's). Prior to the adoption of the 1979 rules on planning, programming, and budgeting for public lands and resources (43 CFR 1600), all land-use plans were Management Framework Plans. The rules now require that all new land-use plans be Resource Management Plans.

Coal activity planning is scheduled in each of the planning units following completion of the respective land-use plans. Proposed dates for calls for expression of interest are set forth below:

Big Sandy	November 30, 1981
Salt Wells	November 30, 1981
White River	January 04, 1982
Pioneer Trails	February 15, 1982
Overland	April 15, 1982
Divide	April 15, 1982
Williams Fork	May 19, 1982

Updating the EIS for the second round of Green River-Hams Fork coal leasing is tentatively scheduled to begin in September 1982.

Southern Appalachian Federal Coal Region (Alabama Subregion) - The DEIS for the Southern Appalachian Coal Region was completed in October 1980. A public hearing on the DEIS was held on November 13, 1980, in Tuscaloosa, Alabama. The FEIS was released on January 14, 1981.

On April 20, 1981, the Secretary approved a proposal to offer 13 of a total of 26 delineated tracts in two sales. However only 12 tracts were offered for lease because surface owner consent was not received for the Harris Cemetery tract. The first sale, for six of the tracts, took place on June 25, 1981, in Montgomery, Alabama. The results of this sale appear in Appendix A, Table A-2. A second sale is scheduled for December 1981 for the remaining six tracts.

Land-use planning efforts continued in Alabama (outside north-central Alabama) and are expected to be completed in September 1983.

Activities planned to start in FY 1982 include:

1. A possible third sale in the first round of leasing will be held in early FY 1982, depending on the degree of interest shown at the December 1981 sale. The RCT will meet shortly after the December sale to discuss this possibility.

2. Tract delineation for the second round of leasing (scheduled to begin in late FY 1983 or early FY 1984) to begin during the summer of 1982.

Uinta-Southwestern Utah Federal Coal Region - The final EIS for the first round of Federal coal leasing in this region was released in February 1981. In June, the Secretary selected ten tracts for sale. The first five tracts were offered and sold on July 30, 1981, in Salt Lake City, Utah. The second five tracts will be offered for sale in FY 1982.

In Utah, the Price River MFP (including application of the coal unsuitability criteria) was completed. This area will be included in the next call for expressions of interest for the second round sale. The Henry Mountains MFP is scheduled for completion during FY 1982. Inventory work is continuing in the Grand and Cedar/Beaver RMP's. Planning in these areas will be completed in FY's 1983 and 1984 respectively.

In Colorado, the North Fork MFP amendment was completed and work is continuing on the Glenwood Springs RMP which is scheduled for completion in FY 1982.

The baseline on anticipated regional coal production for existing mines and properties was completed. The initial call for expressions of leasing interest included coal fields in southern Utah, particularly Kaiparowits, Alton-Kanab, and portions of the Kolob. Additional calls for expressions are anticipated in FY 1982 in central Utah and a portion of west/central Colorado.

Powder River Federal Coal Region - All land-use planning for the eastern Powder River area to be considered for leasing in the first round was completed in FY 1980. After the call for expressions of leasing interest was issued in April 1980, 33 preliminary lease tracts were delineated by the GS.

The alternatives selected for analysis in the EIS were as follows: (1) no new Federal leasing in the region; (2) lease 1.4 billion tons of recoverable Federal coal reserves contained in 13 tracts which would generate 46 million tons of new annual production; (3) lease 1.5 billion tons of recoverable Federal coal reserves contained in 14 tracts which would generate 50 million tons of new annual production; and (4) lease 2.5 billion tons of recoverable Federal coal reserves contained in 18 tracts which would generate 75 million tons of new annual production.

The DEIS was filed with the Environmental Protection Agency and made available for public review on July 23, 1981. The 60-day public comment period closed September 23, 1981, and work was begun to make the necessary corrections in preparation of the FEIS. The FEIS is expected to be available early in FY 1982. The preferred alternative to be evaluated in the FEIS calls for the leasing of 1.5 billion tons of recoverable Federal coal reserves contained in 15 tracts. A Secretarial decision is expected in February 1982 for the scheduled lease sale in April 1982.

Concurrent with the preparation of the DEIS, work was started on land-use planning which will lead to a second-round sale scheduled for June 1984. Four land-use plans will feed into the second-round effort. These are the Western Powder River and Recluse Areas in Wyoming; the Thunder Basin National Grasslands (FS) in Wyoming; and portions of the Powder River Area of Montana.

Fort Union Federal Coal Region - Activity planning in the Fort Union Federal Coal Region began in March 1980, with the initial RCT meeting. This meeting, along with the completion of Redwater and Golden Valley planning amendments, was the impetus of the April 1980 call for expressions of leasing interest in those areas. Twenty-six expressions of leasing interest were received.

The tract delineation team analyzed existing resource data and the expressions, and selected 24 tracts for further coal leasing consideration. Nine of these tracts are located in the Redwater Planning Area of Montana; two additional tracts extend from the Redwater Planning Area of Montana into the Golden Valley Planning Area of North Dakota; and the remainder of the tracts are in the Golden Valley Planning Area. Site-specific analyses for each of the tracts were completed in September 1981.

Preliminary tract ranking and preliminary tract selection by the RCT is planned for November 4, 1981. Final tract ranking and selection will be addressed at a January 1982 RCT meeting. The preparation of the DEIS is scheduled to begin in mid-January 1982 with a scheduled completion and distribution date of June 30, 1982. The FEIS is scheduled for completion in early January 1983. Completion of these activities is expected to lead to coal lease sales scheduled to begin in June 1983.

Western Interior Federal Coal Region (Oklahoma Subregion) - Due to a lack of industry interest the BLM withdrew the Oklahoma Subregion of the Western Interior Coal Production Region from the regional leasing process and instead designated Federal coal reserves in Oklahoma open to lease by application in accordance with 43 CFR 3425 (46 F.R. 41218-41219, August 14, 1981).

The Southeast Oklahoma MFP was amended in FY 1981 to include specific areas for potential underground mining in addition to those areas identified as acceptable for surface mining. The MFP will be amended in FY 1982 to include areas that have been identified in coal lease applications. Lease sales initiated by applications are expected to begin in FY 1982.

San Juan River Federal Coal Region - The MFP update for coal was completed on the Chaco and the San Juan Planning Units. Environmental Assessments (EA) on 26 PRLA's were completed using information contained in the MFP. Activity planning will begin in FY 1982 leading to a lease sale in September 1983. Initial RCT meetings were held in FY 1981 to discuss problem areas and identify significant issues.

Denver-Raton Mesa Federal Coal Region - On June 11, 1981, the Denver-Raton Mesa RCT met to review regional planning status and to discuss with interested members of the public and industry the need for additional regional coal leasing over the next decade. Minimal industry interest

was shown in the region at that time. The BLM anticipates deactivating this region during 1982 until such time as industry interest justifies the time and expense of a full scale activity planning effort. Coal leasing will take place in response to coal lease applications.

Set-Aside Programs

As a matter of Federal coal program policy, at least one tract in each Federal coal production region is set aside for small coal businesses (as defined in 13 CFR Part 121) during each round of lease sales. During FY 1981, a total of four small business set-aside tracts were offered for sale. Table 1 sets forth the details about these set-aside tracts.

No small business coal leases were issued in FY 1981. The apparent high bidders of the Grassy Creek and the Tucker Canyon tracts were the subject of appeals to the Small Business Administration (SBA) during FY 1981. The SBA did not resolve either appeal during the fiscal year.

In FY 1981, one tract was identified for a public body set-aside sale in the Southern Appalachian Coal Region scheduled for December 1981.

Leasing on Application

The coal leasing rules (43 CFR 3425) provide for an application process through which the Department will consider holding lease sales apart from the regional leasing process.

During FY 1981, seven lease sales covering approximately 4,468 acres and containing approximately 43 million tons of recoverable coal reserves were held. The results of these sales are given in Table 2. Two leases were issued from these sales by the end of FY 1981. Two additional leases were issued in FY 1981 from lease by application sales held in FY 1980.

TABLE 1

SMALL BUSINESS SET-ASIDE TRACTS
OFFERED FOR SALE DURING FY 1981

Tract Name	Bidder	Coal Production Region	Acreage	Recoverable Reserves (M/T)	Royalty Rate (%/ton)	Bonus Bid ($/acre)
Grassy Creek	American Minority Mining Corp.	Green River-Hams Fork	440	1.8	12.5	$ 28.50
	Mt. Harris Coal Company *					51.57
Upper Sulfur Springs Church	Apex Mining Corp *	Southern Appalachian	39	0.05	12.5	110.50
	J. J. Israel					25.00
	Jennings Coal Company					30.00
Elm Grove	J. J. Israel *	Southern Appalachian	80	0.07	12.5	25.00
Tucker Canyon	Bishopsgate Coal Company *	Uinta-Southwestern Utah	161.4	0.84	8.0	125.00
	Frank T. Helstan					105.00

*Denotes apparent high bidder

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Coal, Tar Sands, and Oil Shale.

TABLE 2

RESULTS OF LEASE BY APPLICATION SALES
HELD DURING FY 1981

Date of Sale	Applicant	Serial No.	Acreage	Recoverable Reserves (M/T)	Royalty Rate(%)	Bonus Bid ($/acre)
4/22/81	Decker Coal Co.	M-37604	440	21.8	12.5	$ 25.00
5/12/81	Wyoming Fuel Co.	C-30168	140	0.5	12.5	No bid received
5/12/81	Greenwood Land and Mining Co.	ES-15444	409	0.3	8.0	25.05
8/11/81	National King Coal Co.	C-29215	180	0.8	8.0	52.00
9/10/81	Coastal States Energy	U-47080	1,158	13.8	8.0	809.00
9/24/81	Wyoming Fuel Co.	C-31805	376	1.2	12.5	25.68
9/25/81	Ryan's Creek Coal Co.	ES-21181	1,965	4.6	8.0	25.00

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Coal, Tar Sands, and Oil Shale.

The application filed by the Lower Colorado River Authority for lignite reserves located within the Camp Swift Military Reservation in Bastrop County, Texas, was in the final stages of processing. This application was cited in the NRDC v. Hughes amended court order. The FEIS was filed with the EPA on June 23, 1981, and the Director decided on September 24, 1981, to hold a lease sale for approximately 98.4 million tons of reserves contained in 6,444 acres. The lease sale was scheduled to be held on November 10, 1981, in Austin, Texas.

During FY 1981, the Edison Development company application in Wyoming, also cited in the NRDC v. Hughes amended court order, was being processed. The GS was in the final stages of determining the maximum economic recovery (MER) of the coal under application. If a lease sale is approved, it could be held in FY 1982.

Three preference right leases were issued during FY 1981. The leases, covering approximately 14,728 acres of land containing approximately 117.7 million tons of recoverable coal reserves, were issued to Dorchester Coal Company, effective July 1, 1981. One PRLA was rejected because it did not meet the requirements, eight were dropped at the request of the applicants, and one involved lands conveyed to the State of Alaska during FY 1981. As of September 30, 1981, there were 167 PRLA's pending.

Coal Exchanges

Public Law 95-554, 94 Stat. 2073, authorized the Secretary to issue other Federal coal leases in exchange for the relinquishment of eight PRLA's in Utah and nine Federal coal leases in Wyoming. The law requires the leases to be issued and the PRLA's or leases to be relinquished to be of equal value. In June 1981, the Department rejected the Utah exchange because coal resource economic evaluations of the offered PRLA's conducted under the terms of an agreement among the DOI, the FS, and the exchange proponent showed that the PRLA's had insufficient value for exchange purposes. In rejecting the exchange, however, the Department agreed to complete processing of the PRLA's and to make a decision on the issuance of preference right leases by December 31, 1981, the date orginally established for completion of the exchange had it been approved.

The DOI is processing several of the Wyoming coal lease exchanges in conjunction with activity planning in the Powder River Federal Coal Region. Five of the six lessees whose Wyoming leases were authorized for exchange by P.L. 95-554 have submitted exchange proposals. An agreement with one of these lessees, outlining the responsibilities of the parties involved and providing target dates for completing the major steps leading to an exchange, was executed in January 1981. An agreement with another lessee had been signed by the DOI and was awaiting signature by the lessee at the end of FY 1981. An agreement with a third lessee was in preparation at the end of FY 1981. The other lessees have not expressed any desire for exchange agreements.

Public Law 96-476, the Rattlesnake National Recreation Area and Wilderness Act of 1980, was enacted in October 1980. This act provides for the acquisition of non-Federal interests within the boundaries of an area in the Lolo National Forest in Montana, to be known as the Rattlesnake National Recreation and Wilderness Area, by purchase or gift, or by exchange for coal lease bidding rights or coal lease modifications. The Act expresses the intent of Congress that an exchange occur within 3 years of the date of enactment. No action occured in FY 1981 on this exchange.

Public Law 96-401, enacted in October 1980, provides for cancellation of coal leases and permits issued by the Northern Cheyenne Indian Tribe in Montana. The legislation authorizes the Secretary to execute cancellation agreements with lessees, permittees, and the Tribe. Compensation for cancelled leases and permits would be in the form of noncompetitive Federal coal leases off the reservation or certificates of coal lease bidding rights. The lessees and permittees on the reservation would pay fair market value for the noncompetitive off-reservation leases with a credit for investments made on the reservation. Cancellation agreements involving the leases would have to be executed prior to November 1, 1980, to be valid, and cancellation agreements involving the permits would have to be executed prior to January 1, 1982, to be valid. The legislation cancels the leases and permits on those dates whether or not cancellation agreements have been executed. The authority of the Secretary to execute agreements to provide compensation ends on those dates, and any compensation due the lessees and permittees would be decided by the U.S. Court of Claims, if agreements are not reached by those dates.

A cancellation agreement with the holder of six leases and four permits on the Northern Cheyenne Reservation was signed on October 30, 1980. The agreement provides for the issuance of a noncompetitive coal lease for Federal coal lands in Montana by December 1984. Draft cancellation agreements for the remaining permittees were being prepared at the end of FY 1981.

Federal Coal Trespass

Casework - At the beginning of FY 1981, the BLM was investigating 29 cases of actual or potential coal trespass in Alabama and 1 case of actual trespass in Wyoming.

The Wyoming case was closed in January 1981, after the trespasser paid $3,425 in damages for the unauthorized mining of about 730 tons of Federal coal. The Invesco case, in Alabama, was closed after Invesco International Inc., agreed to pay $520,000 plus interest over a maximum of 90 months for the unauthorized mining of 44,000 tons of coal. This settlement was reached through pretrial negotiations between Invesco and the U.S. Attorney for the Northern District of Alabama. A second Alabama case was closed in October 1980 because the trespass was over 30 years old, the suspected trespasser was deceased, and the mine openings were unsafe to enter. The nature of the workings suggests that the trespass involved relatively small amounts of coal removed along the outcrop of the coal bed.

In addition to these settlements, lawsuits to recover more than $2 million in trespass damages have been filed by the U.S. Attorney in five cases and a lawsuit is being prepared in a sixth case. Administrative procedures are underway to collect nearly $4 million in trespass damages in nine other cases. The remaining 13 cases are either under investigation or are under review by the Regional Solicitor or U.S. Attorney to determine an appropriate course of action.

Trespass Detection - The BLM Eastern States Office (ESO) has initiated a pilot Landsat Inventory Development (LID) program to establish systematic and workable procedures for detection, identification, and abatement of unauthorized mineral use. This project is a joint effort of the ESO and the BLM Denver Service Center Branch of Remote Sensing. The primary objectives of this program are: (1) to test the effectiveness of the Landsat digital analysis technique for utilization in detecting land disturbances and/or changes in various ongoing land or mining disturbances; (2) to gather detailed cost data for the Landsat digital analysis techique and to analyze cost effectiveness; and (3) to test the use of conventional aerial photography in conjunction with ancillary mine location information to detect various kinds of reclamation.

This project will be or is being conducted in four eastern States: northwest Alabama (as a test area), Florida, northwest Arkansas, and southeast Missouri. The processing of Landsat tapes on the Alabama sites began in June 1981 and ground verification took place in July 1981. Imagery analysis is now taking place to attempt to correlate the Landsat imagery with the ground verification. Preliminary results indicate that this program will prove to be a valuable tool for resource management and trespass detection.

Cooperative Agreements - The BLM is in the process of preparing cooperative agreements with eastern State Governments. The agreements are intended to provide a framework for cooperation in all BLM and State programs of mutual concern and will provide for an exchange of mineral resource information that will assist the BLM in its minerals management and minerals trespass detection and prevention programs. This effort is concentrated primarily in the eastern States because contact between these State Governments and the BLM historically has been minimal. The BLM has already developed cooperative agreements or other working relationships with western State Governments as a result of the long history of BLM involvement in the West.

Draft agreements, along with fact sheets describing BLM-administered resources and programs within the respective States, have been sent to 18 eastern States. Final agreements with Alabama and Indiana were signed in FY 1981, and final agreements with Mississippi and Louisiana are expected in early FY 1982.

Post Lease Management

Under the FCLAA, coal leases are issued for a primary term of 20 years and, if extended, are readjusted at the twenty year anniversary date and every 10 years thereafter. The terms and conditions of eight leases were readjusted during FY 1981. Three coal leases were modified to include additional lands, and 6 applications for modifications were being processed at the end of FY 1981. No leases were cancelled during FY 1981, but one cancellation was pending in Montana at the end of the fiscal year. One coal lease in Wyoming was relinquished in FY 1982. See Table Table 3.

Technical Investigations (EMRIA)

The program for hydrologic, overburden, and soils/revegetation technical investigations (formerly known as the Energy Minerals Rehabilitation Inventory and Analysis (EMRIA) Program) received a major policy direction change in FY 1981.

Because the SMCRA requires detailed specification of soil and overburden handling and revegetation procedures prior to approval of a mining permit, studies of overburden, soils, and revegetation are most efficiently carried out after leases are issued. This policy change thus shifts the responsibility for these studies from the BLM to the lessee, resulting in a savings to the government approaching seven million dollars per year. Components of the leasing program, e.g., application of the unsuitability criteria to unleased lands and preparation of tract profiles of delineated tracts, will continue to identify the most serious revegetation problems.

This change in policy consciously maintains hydrologic studies as appropriate for pre-leasing decisions because hydrologic impacts from mining actions: (1) are far-reaching (especially for surface water); (2) cannot be predicted with the short periods of record obtainable during mine and reclamation plan preparation (particularly in arid western States); (3) are not site-specific to the mine tract: (4) will occur any time a volume of earth on the scale typical of surface mining operations is disturbed; and (5) have been identified as among the major concerns in pre-EIS scoping efforts.

Individual technical investigations conducted in FY 1981 are listed in Appendix E. These investigations either supplied data and information directly for EIS's, EA's, tract delineation, tract ranking, lease stipulations, and post-mining land-use determinations, or were used in the EMRIA reclamation study area publications and special emphasis reports. Because of the above-mentioned change in policy concerning questions of reclaimability, all unfinished EMRIA reclamation study area reports are to be completed in the first quarter of FY 1982.

TABLE 3

NUMBER OF READJUSTMENTS AND
MODIFICATIONS DURING FY 1981
AND NUMBER OF PENDING READJUSTMENTS
AND MODIFICATIONS, BY STATE: SEPTEMBER 30, 1981

State	Number of Readjustments	Readjustments Pending	Number of Modifications	Modifications Pending
TOTALS	8	75	3	6
Colorado	1	26	1	2
Montana	0	1	0	1
New Mexico	1	9	0	0
Oklahoma	1	8	1	0
Utah	5	16	1	3
Wyoming	0	15*	0	0

*Ten of these readjustments are in litigation or on administrative appeal.

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Coal, Tar Sands, and Oil Shale.

U.S. GEOLOGICAL SURVEY

The major coal-related activities of the GS during FY 1981 were the efforts for the Coal Exploratory Program, lease supervision, and the Coal Hydrology Program.

The Coal Exploratory Program consists of environmental and coal resource assessments done on a regional level as well as on a more detailed local level. Much of the data derived from these assessments and studies are entered into the NCRDS, a computer-based resource data system, and much are used directly to support the Federal coal program. In addition to these data collection activities, the GS is responsible for the supervision of Federal coal leases, the assessment of damages in Federal coal trespass cases, the geologic, engineering and economic evaluation of Federal coal leases and exchanges, and delineation of potential lease tracts during the coal activity planning process. The Coal Hydrology Program consists of hydrologic data collection, aerial studies, and research associated with the availability of water to support increased coal development and the impacts of such development on the hydrology. A description of these FY 1981 activities is presented in this section.

Coal Exploratory Program

Regional Geologic and Coal Resource Assessment Activities - Regional assessment activities include preparing coal resource bedrock and surficial geologic maps of coal lands and associated areas; conducting engineering-geologic and geologic hazard, coal quality, and geochemistry studies; drilling; and assessing coal resources. These data are compiled into folios of maps at the scale 1:100,000 for areas of priority interest for Federal coal lease sales and scientific information needs. In FY 1981, regional geologic studies and coal resource assessment activities were underway in all coal basins west of the 100th Meridan and in the Appalachian and Gulf Coast Provinces. In addition, several State geologic agencies were supported by the GS in appraisal of their coal deposits and concerns related to coal production and utilization. In support of the Federal coal program, emphasis was placed on completing the coal folios and topographic regional base map coverage for priority areas in the western Federal coal regions.

Regional assessments are carried out on a continuing basis from year to year and require up to 3 years to complete because of the size of the map area (1,800 square miles per 1:100,000-scale map), the geologic complexity of the area, and other constraints. During FY 1981, these studies provided 8 bedrock geologic maps, 12 surficial geologic maps, and 5 geologic hazard maps. Geochemisty studies for the northwestern Colorado area and the Fort Union Federal Coal Region were completed.

Detailed Coal Evaluation Activities - Detailed coal evaluation activities involve primarily the analysis of certain areas to meet the classification, tract delineation, resource and economic evaluation requirements of the Federal coal program. In FY 1981, the regional assessments, detailed drilling programs, and site-specific studies provided data that were used in tract delineation and evaluations.

Drilling - In support of the regional resource assessment folio program, a total of about 4,600 feet of core drilling and 57,000 feet of rotary drilling were completed in FY 1981. About 1,550 feet of core samples and cuttings were obtained in order to acquire coal quality information, geotechnical testing for engineering data, establishment of local and regional geochemical backgrounds, determination of methane content of coal beds, study of rocks intimately associated with coal, and many other purposes. A large amount of data has been obtained from holes drilled as part of the coal program, as well as from oil and gas test wells, water wells, and geophysical techniques such as natural radioactivity measurements and density measurements that respond to the very low natural radioactivity and low specific gravity of most coal. More than 70,000 feet of various drill holes were logged geophysically in FY 1981.

Coal Resources - Coal quantity and quality assessments show the distribution and continuity of the coal resources as well as the variations in heating value, impurities, moisture, ash content, and trace element concentrations. There were 28 projects covering 36 1:100,000-scale quadrangles in progress in FY 1981. Many of these will continue in FY 1982. Thirty-four reports and 15 maps were completed in FY 1981, and mapping is planned for 5 new 1:100,000-scale maps in FY 1982.

Topical Reports - Numerous topical reports and maps on research activities that are supportive of the work of the coal program have been prepared and published by the GS. During FY 1981, 61 reports and 9 maps on topical investigations supportive of the program were prepared, and a similar number are planned for FY 1982.

National Coal Resource Data System - Approximately 10,000 drill hole (over 1 million feet of stratigraphic section) and coal outcrop records covering roughly 15,000 square miles were entered into the NCRDS during FY 1981. The largest contribution came from cooperative programs with 15 State geologic agencies. In addition, more than 5,000 coal resource estimate records and 1,000 geochemical analysis records were entered into the system. A two-fold increase in the FY 1981 level of data entry is planned for FY 1982. The NCRDS computer calculation of coal resources will begin in various quadrangles of the coal folio program and in State cooperative areas in FY 1982.

Known Recoverable Coal Resource Area Classifications (KRCRA) - Areas where coal data are sufficient to determine the extent, depth, thickness, quality, and potential for development are classified as KRCRA's. The coal resources within the KRCRA's and within land-use planning areas are further classified by the GS according to their development potential. The determination is based on whether the coal resources are of sufficient quality and quantity to be mined economically or are likely to become economically minable during the life of the LUP. The areas with Federal coal resources identified as having high and moderate development potential were further analyzed in the land-use planning process. During FY 1981, one KRCRA was redefined, adding 10,640 acres of land to those already classified. Thus, at the end of FY 1981, there was a total of 64 KRCRA's covering 22,493,336 acres of land.

Tract Delineation - The GS used the results of the detailed evaluations to identify areas that have been cleared by the surface management agencies for further consideration for coal leasing and to delineate those areas into potential coal lease tracts. For each tract, the GS provides reports that form the basis of subsequent site-specific environmental studies conducted by the BLM. In FY 1981, tract delineation was completed in the Powder River and Fort Union Federal Coal Regions.

Tract Evaluation - Each Federal coal tract scheduled for lease sale is evaluated to determine its fair market value (FMV). On May 28, 1980, the Secretary designated the GS to be solely responsible for conducting evaluations to determine the FMV and minimum acceptable bids for Federal coal leases. The pre-sale evaluations are based on geologic and engineering factors, market conditions, and comparable sales; are compiled in an economic site-specific report; and are utilized to make a FMV determination. The FMV was determined for competitive lease sale tracts in the Green River-Hams Fork, Uinta-Southwestern Utah, and Southern Appalachian Federal Coal Regions during FY 1981.

Preference Right Lease Applications - During FY 1981, the GS completed its evaluation of the exchange of PRLA's held by Utah Power and Light Company in the Kaiparowits Plateau area in Utah for three tracts in the Wasatch Plateau. The Department rejected the exchange in June 1981 based on the GS determination that the offered lands were not within the legally mandated 25 percent of the value of the selected lands.

Lease Supervision

Lease Management - For Federal lands, the GS has the responsibility for:

1. Supervising production and resource recovery of coal mining operations;

2. Reviewing and concurring with mining plans and exploration plans in an approved mining permit area to establish production and coal resource recovery requirements;

3. Approving exploration plans, providing NEPA compliance, and supervising exploration either under an exploration license or on a lease outside an approved mining permit area;

4. Making geologic, engineering, and maximum economic recovery (MER) determinations for coal-related actions of the DOI, such as establishing LMU's and monitoring diligent development and continued operation; and;

5. Maintaining the rental and royalty collection and accounting system.

In FY 1981, the GS continued to monitor coal operations in 15 states, including Alaska, Alabama, Kentucky, Washington, and Oregon, as well as the major coal-producing states of the Rocky Mountains and Northern Great Plains. During FY 1981, the GS conducted on-site inspections of Federal lands, coal leases, permits, and mines in support of the GS's responsibilities under the Mineral Leasing Act of 1920, as amended. Table 4 provides information on the number of coal inspections in FY 1981.

Federal Coal Trespass Assessment - The GS is responsible for determining a dollar value of the coal that was mined or lost in mining on all tracts where trespass has been verified. Of the 19 tracts in Alabama where trespass was verified in FY 1979, the GS estimated that 600,000 tons of coal valued at more than $7 million had been mined or spoiled.

Federal Coal Royalties Collection - The GS is responsible for collecting the royalty payments for Federal coal leases. During FY 1981, $40.3 million of Federal royalties were collected on a coal production value of slightly over one billion dollars (Table 5). With the exception of Alaska, 50 percent of the royalties is returned to the State Treasury, 40 percent is placed in a Federal reclamation fund that was established by the Reclamation Act of 1902, and 10 percent remains in the U.S. Treasury's miscellaneous receipts. Ninety percent of the royalties from mining in Alaska are returned to the State Treasury.

The Federal royalties amounted to an average of 3 percent of the production value of the coal. The difference between this value and the present minimum royalty requirement of 12.5 percent for surface-mined coal results from production taking place on leases issued before the DOI converted from a fixed cents-per-ton royalty to a percent ad valorem royalty provision. The fixed cents-per-ton royalty provisions, which were frequently set at between 15.0 and 22.5 cents per ton, cannot be changed until the readjustment period of a lease is reached. The amount of money collected under a cents-per-ton royalty does not increase as the value of the coal production increases. During the 1970's, the DOI shifted to percentage ad valorem royalty rate which increase royalty payments to the Federal Government as the value of the coal increases. Conversely, the Federal Government will share the risk with the lessee, receiving in absolute terms less royalty money should the future of coal decrease. The

TABLE 4

COAL INSPECTIONS ON FEDERAL LANDS: FY 1981

Activity	All Offices	GS Administrative Regional Office				
		North Central	Central	South Central	Eastern	Western
TOTAL	1,129	303	614	208	3	1
Producing Surface Mines	383	219	62	102	-	-
Producing Underground Mines	305	11	292	1	1	-
Active Lease Permits	160	25	101	34	-	-
Inactive Lease Permit	124	9	73	41	1	-
Technical Exams	25	9	11	4	-	1
Abandonment and Reclamation	109	30	74	5	-	-
Other	23	-	1	21	-	-

SOURCE: U.S. Department of the Interior, Geological Survey, Conservation Division, unpublished data.

TABLE 5

FEDERAL COAL PRODUCTION VALUE AND ROYALTY PAYMENTS,
BY STATE: FY 1981

State	Coal Production (tons)	Production Value(s)	Royalty Value(s)
TOTAL	94,644,568	$1,198,764,241	$40,280,418
Colorado	11,451,283	227,785,098	11,952,875
Montana	15,402,089	161,459,953	3,922,771
New Mexico	8,872,863	93,744,378	3,440,772
North Dakota	200,274	1,301,209	101,677
Oklahoma	276,937	11,579,772	1,009,820
Utah	8,577,248	207,581,526	5,094,133
Wyoming	49,863,874	495,312,305	14,758,370

NOTE: The statistics represent production and royalty reported during FY 1981 and adjustments made during FY 1981 for prior periods. The FY 1981 royalty management statistics may not represent actual production achieved in FY 1981 or the royalty accrued on that production due to adjustments for previous years. This data is unpublished.

SOURCE: U.S. Department of the Interior, Geological Survey, Conservation Division, Royalty Management Office.

percentage type of royalty provision was adopted in the FCLAA and the percentage of Federal royalties as compared to the production value has increased every year since. Federal royalties increased from 2.2 percent of the production value in FY 1978 to 3 percent in FY 1981.

Coal Hydrology Program

Water Resources Data Activities - In FY 1981, the GS collected data at about 300 continuous recording sites and 2,000 synoptic measurement sites in coal areas nationwide. Water data collected by the GS and other Federal, State, and local agencies are indexed by the National Water Data Exchange (NAWDEX) managed by the GS Water Resources Division. These indexed data are being used to produce a 5-volume "Index to Water Data Activities in Coal Provinces of the United States." By the end of FY 1981, 4 volumes of the index had been printed. The fifth volume, covering the Pacific Coast and Alaska Provinces, will be printed during FY 1982. These printed indexes are available free and contain information about surface-water quantity and quality, ground-water quality, and aerial investigations and other data-collection activities.

Hydrology of Coal Areas - A major activity under the Coal Hydrology Program is the preparation of a series of reports describing current hydrology in the principal coal areas in the Nation. Each area described is a subdivision of one of the major coal provinces, including both Federal and private coal resources where development is, or is likely to become, of major importance to either or both the local and national economies. The reports present geohydrologic information on surface and ground water resources that will aid the applications filing and review procedures for coal mining permits as required by the rules implementing the SMCRA. By the end of FY 1981, five reports were published and another 16 were in the final stages of preparation. Approximately 60 such reports are planned.

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

The primary objective of the OSM is to protect society and the environment from the adverse effects of surface coal mining operations and to do so under conditions of expanded coal production consistent with the Nation's need for energy. The OSM's principal roles relative to Federal lands are to: (1) define policy and promulgate rules establishing performance standards and program administration processes; (2) review and process permit applications and mining plans, including such activities as are necessary for NEPA compliance, and recommend action on mining plans to the Secretary; (3) negotiate Federal/State cooperative agreements for State regulation on Federal lands pursuant to Section 523(c) of the SMCRA;

(4) in the absence of a Federal/State cooperative agreement, carry out the permitting, inspection and enforcement, and other functions of the regulatory authority as set forth in the SMCRA; (5) provide oversight of State administration of the regulatory requirements under the terms of an approved Federal/State cooperative agreement; and (6) administer a program to designate Federal lands unsuitable for surface coal mining under the petition process specified in Sections 522(a) and (c) of the SMCRA.

Surface Mining Rules

The environmental protection provisions of the SMCRA have been enacted in two phases in accordance with Section 501 and 502 -- the initial program and the permanent program. The initial program has been in effect since December 13, 1977, when the Secretary promulgated interim program rules (30 CFR Parts 710-725 and 795). The permanent program becomes effective in each State upon Secretarial approval of a State program or implementation of a Federal program within the State. If a State program is approved, the State rather than the Federal Government will be the primary regulator of activities subject to the SMCRA. By the end of FY 1981, two States had received conditional program approval with only very minor changes required, six States received partial program approval, and three State programs were disapproved. Of the nine State programs receiving partial approval or disapproval, two revised programs have been submitted for further consideration. The remaining seven programs are expected to be revised and submitted by February 1982.

The Federal lands rules (30 CFR 740-745) are presently being revised to give the States more responsibility for controlling surface coal mining and reclamation operations.

Petitions to Designate Areas Unsuitable for Surface Coal Mining

On April 12, 1979, the effective date of the permanent regulatory program, Federal lands became subject to the petition process for designating Federal lands unsuitable for surface coal mining operations. Through FY 1981, four complete petitions had been received by the OSM.

The first complete petition received by the OSM dealt with the Alton coal field adjacent to Bryce Canyon National Park in southern Utah. The unsuitability petition was filed by the Environmental Defense Fund, Friends of the Earth, the Sierra Club, and others. The petition involved 203,900 acres of Federal land, 16,300 acres of State land, and 68,600 acres of private land. The decision on January 16, 1981 to permit surface coal mining in a major part of the Alton coal field is currently being challenged; the Department of Justice has filed a motion in the District Court of Utah seeking authority for the DOI to review the decision.

The second complete petition received by the OSM was from the West Virginia Highlands Conservancy. It requested that certain Federal lands within the Monongahela National Forest, located in the watershed of the Shavers Fork River in West Virginia, be designated as unsuitable for surface coal mining operations. The decision on April 21, 1981, rejected an unsuitability designation, but placed conditions on coal mining operations in the petitioned area.

The Tongue River petition was received by the OSM on December 29, 1980, from the Northern Great Plains Resource Council requesting designation of 194,650 acres in southeast Montana along the Tongue River as unsuitable for surface coal mining operations. The petition evaluation document for Tongue River was distributed in September 1981, and a decision is scheduled to be made by December 29, 1981.

Camp Swift was the most recent petition, received by the OSM on August 7, 1981. Mr. John Prager of Elgin, Texas, petitioned the OSM to have 2,375 acres of Federal land designated as unsuitable. The State regulatory authority was petitioned at the same time for approximately 30,000 acres of privately-owned land adjacent to the petitioned Federal land. The petitioned lands lie in the northeast protion of the Camp Swift Military Reservation, which is about 30 miles southeast of Austin, Texas.

Federal/State Cooperative Agreements

Administration of most SMCRA requirements for the Federal lands program may be delegated by the OSM to States through cooperative agreements, with enforcement accomplished by State regulatory authorities. Certain responsibilities cannot be delegated and are retained by the Secretary.

During FY 1981, permanent program cooperative agreements were entered into with Wyoming and Montana and agreements with Colorado, New Mexico, North Dakota, Utah, and West Virginia were being processed. Most States with Federal coal development are expected to request cooperative agreements under the permanent program.

Inspection and Enforcement

Inspection and enforcement activities on Federal lands are carried out under two separate procedures. In States having approved Federal/State cooperative agreements, inspection of surface mining activities on Federal lands is the responsibility of the designated State regulatory authority (SRA). The OSM, however, maintains an oversight function to ensure that the SRA fully exercises its delegated responsibility under the cooperative agreement. In States not having an approved Federal/State cooperative agreement, the required inspection and enforcement activities are carried out by the OSM.

Mining Permits/Mining Plan Review

The permanent program on Federal lands (30 CFR 741 et seq.) becomes effective in each State on the date of approval of each State program. Mining plans and permit applications under the permanent program are being jointly reviewed by the OSM and the States. It is expected that States with approved permanent program cooperative agreements will undertake a significant amount of responsibility for the technical/environmental review of mine plans in future years. In FY 1981, the OSM faced a heavy workload of reviewing mine plans for surface and underground coal mine operations on Federal lands. At the beginning of FY 1981, the OSM had 39 mining plans pending review. During the year, 74 more were received. Eleven plans were approved during FY 1981. At the beginning of FY 1981, 15 plans were being actively evaluated and by the end of the fiscal year, 21 plans were being evaluated.

FISH AND WILDLIFE SERVICE

In the DOI's Federal coal management program, the FWS has several roles that are mandated by statute and regulation. The primary objective of the FWS is to insure that protection of fish and wildlife resources receives adequate consideration in the development of the Nation's coal resources. This includes protection of species and habitats that might be affected by coal mining and related activities. Emphasis is placed on data gathering and analysis to identify potential areas of conflict, and on assistance in developing alternatives that avoid or minimize of losses and to provide opportunity for enhancement.

The FWS conducts both operational and research coal activities, with operations implemented by its Ecological Services offices located in the regions. Data support is provided by the Office of Migratory Bird Management, the Division of Wildlife Research and the Office of Biological Services. Research and development support is furnished primarily by the FWS Western Energy and Land-Use Team in Fort Collins, Colorado, and the Eastern Energy and Land-Use Team in Leetown, West Virginia.

Operations

The FWS participation in the BLM land-use planning process focused primarily on: (1) RMP's and initial inventory studies; (2) MFP amendments; (3) site-specific EIS reviews; and (4) activity planning associated with the regional tract delineation and EIS support teams. In addition, FWS biologists provided technical assistance to the BLM and the OSM in the review of PRLA's, exchanges, lease modifications and readjustments, emergency lease and exploration license applications, and mining and reclamation plans.

Review comments were provided on proposed changes in the Federal coal management rules, and the FWS participated in development of guidelines for Best Technology Currently Available (BTCA) on mine highwalls.

Inventory Data Collection

The FWS assisted the BLM and the OSM in the southeastern States in identifying, developing, and ranking proposed research and development studies that would address "high priority" fish and wildlife problems and issues within Federal coal areas. Through technical reviews of the BLM and the OSM draft study reports and dissemination of its project documents, the FWS has provided guidance to industry concerning protection, mitigation, and enhancement of fish and wildlife resources.

The FWS continues to coordinate national wetland inventory activities with the BLM and other Federal agencies. Reclamation techniques are being developed, vegetation mapped, and data analyzed for unsuitability determinations. Aerial photography has been accomplished in northeast Texas, and draft wetland maps are being produced. The aerial photography of eastern Oklahoma, which will cover the bulk of Federal coal in Oklahoma, is scheduled for FY 1982.

An extensive survey was conducted to locate existing and potential nesting sites for golden eagles and cliff-nesting falcons in the Price River and San Rafael Resource Areas in Utah. In cooperation with the BLM, the FWS conducted an inventory of nesting golden eagles and migratory birds of high Federal interest in the Green River-Hams Fork, and Uinta-Southwestern Utah Federal coal regions, and in west-central North Dakota. These data are being used by surface management agencies for planning. The FWS is cooperating with State wildlife agencies to develop baseline resource information and to assist in development of the BTCA to mitigate the impacts of coal mining on wildlife. Literature syntheses on population, habitat requirements, threshold disturbance levels, and mitigation opportunties were completed for 21 of 30 species of migratory birds of high Federal interest.

Rapid Assessment Methods

The extensive fish and wildlife resources that occupy Federal coal lands and the potential for conflict with coal development require rapid data generation, handling, and analysis for multiple-use planning. In response to this need, the FWS developed a variety of remote sensing and computer tools known as Rapid Assessment Methods (RAM) that are designed to assist planners and decisionmakers in evaluating land development impacts on fish and wildlife. Analyses and information provided through RAM form a cornerstone for FWS recommendations on coal leasing issues. Incorporation of these recommendations will minimize fish and wildlife loss and maximize habitat enhancement opportunities while enabling coal development to meet national energy objectives.

In FY 1981, RAM data bases and products were used by the Powder River RCT to rank and select tracts, by the FWS to provide tract ranking and selection recommendations to the Powder River RCT, by the BLM to produce the Powder River EIS, by the FWS and the OSM to respond to the Tongue River unsuitability petition in southeastern Montana, and by the BLM and the FWS to determine lands unsuitable for surface coal mining operations based upon wildlife considerations in the Fort Union Federal Coal Region.

The FWS, in cooperation with the BLM and the OSM, implemented agreements to initiate a cooperative State/Federal/private effort for organization, collection, and management of fish and wildlife information and to identify and select candidate states of priority interest for implementing a computerized fish and wildlife information system ("A Procedure for Describing Fish and Wildlife"). As a result, the FWS has entered into agreements with eight states to implement "Procedures" data bases during FY 1981 and FY 1982. The BLM and the OSM are providing support for this undertaking in five of the States.

DEPARTMENT OF ENERGY

In FY 1981, the DOE issued the national and regional coal production goals. Final high, medium, and low goals for 1985, 1990, and 1995 were issued following the DOI and public comments on the preliminary goals. The medium national goals are 1,117.9 million tons for 1985, 1,620.0 million tons by 1990 and 2,214.2 million tons by 1995. The goals are based on estimated demand for coal by the electric utility, industrial, synthetic fuel, and export sectors of the economy. These goals are used as one factor by the RCT in establishing the regional leasing targets.

Final rules governing the bidding procedures were published December 23, 1980. These rules authorize the use of the existing cash bonus/fixed royalty bidding system. During FY 1981, the DOE drafted rules governing diligent development of federal coal leases.

U.S. DEPARTMENT OF AGRICULTURE - FOREST SERVICE

The USDA, through the FS, continued to implement their responsibilities in the Federal Coal Program during FY 1981. The FS effort included conducting land management planning, participation in Regional lease sales, responding to lease by applications, lease modifications, lease readjustments, exploration licenses, exchanges, PRLA's, and mining permit applications, and processing trespass cases.

Land Management Planning - The FS continues development of management plans for the Manti-LaSal, Fish Lake, and Dixie National Forests in Utah; Targhee National Forest in Idaho; San Juan, Grand Mesa, Uncompahgre and Gunnison National Forests in Colorado; and the Bridger-Teton and Medicine Bow National Forests in Wyoming.

Regional Coal Teams - Activity Planning - The FS participated as an ex-officio member in the Green River-Hams Fork, Uinta-Southwestern Utah, Powder River and Denver-Raton Mesa Federal Coal Regions Regional Coal Teams. The FS participated in activity planning in the Powder River and Uinta-Southwestern Utah Federal Coal Regions.

Leasing by Application - Lease applications responded to by the FS include:

LOCATION	NAME	STATUS
Jefferson NF, Virginia	Clinchfield	Pending
Daniel Boone NF, Kentucky	Greenwood Land and Mining Co.	Completed
Kisatchia NF, Louisiana	TRIARC	Pending
Daniel Boone NF, Kentucky	Ryan's Creek Coal Co.	Completed
Wayne-Hoosier NF, Indiana-Ohio	Belville	Completed
Wayne-Hoosier NF, Indiana-Ohio	Boyle Coal Co.	Pending
Wayne-Hoosier NF, Indiana-Ohio	Collins	Pending
Shawnee NF, Illinois	Peabody Coal Co.	Pending

Exploration Licenses - The FS responded to three licenses in Utah and one in Wyoming.

Coal Exchanges - The FS is assisting the DOI in processing an exchange authorized by P.L. 95-554 in conjunction with Activity Planning in the Powder River Federal Coal Region.

Post Lease Management - Two readjustments of leases and one coal lease modification were processed during FY 1981.

Petitions to Designate Areas Unsuitable for Surface Mining - The FS assisted OSM in the Highlands Conservancy petition which involved Federal land within the Monongahela National Forest, West Virginia.

Mining Permits/Mining Plan Review - The FS responds and consents to mining proposals involving National Forest System lands.

LOCATION	# PERMITS	STATUS
Thunder Basin National Grasslands - Wyoming	4	Pending
Jefferson NF - Virginia	4	Pending
Daniel Boone NF - Kentucky	15	Completed
Daniel Boone NF - Kentucky	10	Pending
National Forest in Alabama	4	Completed
National Forest in Texas	2	Completed
Monongahela NF - West Virginia	1	Completed
Wayne-Hoosier NF - Indiana-Ohio	1	Pending
Shawnee NF - Illinois	4	Pending
Shawnee NF - Illinois	1	Completed

LITIGATION

No new lawsuits related to Federal coal were filed during the fiscal year. Several lawsuits discussed in the FY 1980 Federal Coal Management Report were decided. Hiko Bell Mining and Oil Company v. Andrus and Peterson v. DOI were decided in one opinion, 510 F. Supp. 777 (D. Utah 1981), in which the District Court reversed the Department's decisions rejecting the prospecting permit extension applications and remanded the applications for adjudication on their merits.

A number of other lawsuits discussed in the FY 1980 report have not been resolved. Included are the Utah International, Inc. v. Andrus, et.al., 488 F. Supp. 976 (D. Colorado 1980), case dealing with the processing of PRLA's (negotiations to settle the cross-appeals pending in the Tenth Circuit are underway between the parties); and Rosebud Coal Sales Company v. Andrus, et. al., Civil No. 80-1842 (D. Wyoming), and California Portland Cement Co. v. Andrus, Civil No. C-79-0477 (D. Utah), which have become a joint case and are pending a decision on the government's appeal of adverse district court decisions. At issue in the case is the DOI's authority to readjust the terms and conditions of a lease after the expiration of the 20-year lease period. A similar pending case is Western Slope Carbon Co. v. Cecil D. Andrus, Civil No. 79-M-1438. (D. Colorado), in which the Colorado court reached the same conclusion as Rosebud. Two additional cases dealing with the alluvial valley floor provisions of the Federal coal program rules (43 CFR 3437), certain unsuitability criteria, and the application of the unsuitability criteria to leased lands were joined by the court and the government's appeal from several parts of the district court decision has been postponed pending revisions to the Federal coal rules. These are Texaco v. Andrus, No. 79-2448, and NCA, et. al., v. Andrus, No. 79-2458 (D. D. C., August 15, 1980).

MAJOR ISSUES AND RECOMMENDATIONS

Last years's Federal Coal Management Report, published shortly after the change in administration, indicated a review of the regulations and policies guiding the Department's coal leasing program would be undertaken.

Public comments on proposed regulatory reform of the coal leasing and mining supervision programs will be solicited during the first part of FY 1982. These changes were proposed to streamline the coal management procedures and to comply with court mandates. A detailed description of rule changes will be included in the FY 1982 Federal coal report.

APPENDIX A

COAL STATISTICS

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TABLE A-1

FEDERAL COAL LEASES, BY EFFECTIVE
DATE: FISCAL YEAR 1981

Effective Lease Date	State	Lessee(s)	Serial Number	Acreage	Recoverable Reserve Tonnage (million tons)	Royalty Rate (percent)	Bonus Bid ($/acre)
10/01/80	Wyoming	Medicine Bow Coal Co.	W58095	1,280	4.10	12.5	25.00
11/01/80	North Dakota	Knife River Coal Mining Co.	M43083	80	1.00	12.5	25.00
06/01/81	Wyoming	Capital Development Co.	W72990	1,832	7.80	12.5	167.00
07/01/81	Colorado	Empire Energy Corporation	C30656	682	20.00	8.0	405.00
07/01/81	Colorado	Consolidation Coal Co.	C29224	876	34.20	12.5	560.00
07/01/81	Colorado	Hayden Gulch Coal Co.	C29217	5,298	63.64	12.5	1,700.00
07/01/81	Colorado	Dorchester Coal Co.	C0127832	4,522	32.80	8.0	-----
07/01/81	Colorado	Dorchester Coal Co.	C0127833	5,087	50.70	8.0	-----
07/01/81	Colorado	Dorchester Coal Co.	C0127834	5,120	34.20	8.0	-----
07/01/81	Montana	Decker Coal Co.	M37604	440	21.80	12.5	25.00
08/01/81	Colorado	Engery Fuels Corporation	C29220	274	.73	12.5	
09/01/81	Kentucky	Greenwood Land & Mining Co.	ES15444	409	.26	8.0	25.00
09/01/81	Wyoming	Medicine Bow Coal Co.	W72989	4,443	13.20	12.5	52.00
09/01/81	Wyoming	Ark Land Coal Co.	W72991	3,010	10.90	12.5	137.50

SOURCE: Compiled by U.S. Department of the Interior, Bureau of Land Management, Division of Coal, Tar Sands, and Oil Shale, October 1981.

TABLE A-2

RESULTS OF REGIONAL COAL LEASE
SALES HELD DURING FISCAL YEAR 1981

Sale Date	Tract Name	Bidders	Serial Number	Acres/ Million Tons	Royalty (%/Tons)	Bonus Bid ($/acre)	Location of Tract
01/14/81	Medicine Bow	*Medicine Bow Coal Co. Ronson's, Incorporated	W-72989	4,443/13.2	12.5	$ 52.00 25.10	Carbon County, Wyoming
01/14/81	Seminoe II	Ark Land Coal Co. *Capital Development Co. Ronson's, Incorporated	W-72990	1,832/ 7.8	12.5	27.50 167.00 25.10	Carbon County, Wyoming
01/14/81	Rosebud	*Ark Land Coal Co. Capital Development Co. Ronson's, Incorporated Peter Kiewit Sons	W-72991	3,010/10.9	12.5	137.50 105.00 25.10 25.00	Carbon County, Wyoming
01/13/81	Empire	Capital Development Co. *Empire Energy Corp.	C-30656	682/20.0	8.0	210.00 405.00	Moffat County, Colorado
01/13/81	Danforth I	Capital Development Co. *Consolidation Coal Co. Colo-Wyo Coal Co. Pioneer Coal Co.	C-29224	876/34.2		260.00 560.00 130.00 400.00	Moffat County, Colorado
01/13/81	Grassy Creek (SBA set-aside)	American Minority Mining Corp. *Mt. Harris Coal Co.	C-29221	440/ 1.8	12.5	Qualifications of high bidder on appeal to SBA	Routt County, Colorado
04/30/81	Hayden Gulch	Atlantic Richfield Co. Freeman Coal Mining Co. *Hayden Gulch West Coal Co. Peabody Coal Co.	C-29217	5,298/63.6	12.5	510.00 1,600.00 1,700.00 No Oral Bid	Routt County, Colorado

Sale Date	Tract Name	Bidders	Serial Number	Acres/ Million Tons	Royalty (%/Tons)	Bonus Bid ($/acre)	Location of Tract
04/30/81	Pinnacle	*Energy Fuels Corp.	C-29220	273.2/0.73	12.5	25.00	Routt County, Colorado
06/25/81	Upper Sulfur Springs Church (SBA set-aside)	*Apex Mining Co. J. J. Israel Jennings	ES-26904	39/0.49	12.5	110.50 25.00 30.00	Fayette County, Alabama
06/25/81	Elm Grove (SBA set-aside)	*J. J. Israel	ES-27220	80/.069	12.5	25.00	Walker County, Alabama
06/25/81	Goodwin Creek	*Apex Mining Co. Brilliant Coal Co.	ES-26900	202/.466	12.5	110.50	Walker County, Alabama
06/25/81	North River	*Gulf Oil/Republic Steel	ES-26901	1,198/5.9	6.6	35.00	Tuscaloosa County, Alabama
06/25/81	Upper North River	Gulf Oil/Republic Steel *Jennings Coal Co.	ES-26902	41/.338	6.6	136.00	Fayette County, Alabama
06/25/81	Rock Springs Church	U.S. Steel	ES-27072	3,480/30.9	6.6	30.00	Tulcaloosa County, Alabama
07/30/81	Cottonwood	Blackhills Oil & Gas *Utah Power & Light North American Coal Natomas Coal International Minerals and Chemical Northwest Carbon Sunoco Menefee Land Co. Emery Energy	U-47978	3,348/23.12	8.0	725.00 3,150.00 80.00 2,100.00 2,985.00 595.00 3,125.00 2,750.00 390.00	Emery County, Utah

Sale Date	Tract Name	Bidders	Serial Number	Acres/ Million Tons	Royalty (%/Tons)	Bonus Bid ($/acre)	Location of Tract
07/30/81	Gordon Creek	Black Hills Oil & Gas	U-47975	4,284/26.0	8.0	No Oral Bid	Carbon County, Utah
		Rochester's & Pittsburgh Coal				No Oral Bid	
		*Kanawha & Hocking Coal Co.				355.00	
		International Minerals and Chemicals				35.00	
		Emery Energy Co.				350.00	
07/30/81	Miller Creek	Black Hills Oil & Gas	U-47974	1,999/17.32	8.0	No Oral Bid	Carbon County, Utah
		*Kanawha & Hocking Coal Co.				630.00	
		Emery Energy Co.				625.00	
		Western Reserve Coal Co.				420.00	
07/30/81	Meetinghouse Canyon	*Utah Power & Light Co.	U-47979	1,063/12.4	8.0	805.00	Emery County, Utah
		Eldon Kingston				No Oral Bid	
		Emery Energy Co.				800.00	
07/30/81	Tucker Canyon (SBA set-aside)	*Bishopsgate Coal	U-47973	161.4/.840	8.0	Qualifications of high bidder on appeal to SBA	Carbon County, Utah
		Frank T. Helsten					

* Apparent high bidder

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Coal, Tar Sands, and Oil Shale

TABLE A-3

SURFACE ACREAGE OF LEASES, BY STATE AND BY SURFACE OWNERSHIP: SEPTEMBER 30, 1981

State	Number of Leases	Total Acres	FEDERAL LANDS			Native American	State	Private
			BLM	FS	OTHER			
TOTAL	575	842,949	377,477	84,497	1,404	9,148	37,275	333,144
Alabama	2	2,909						2,909
Alaska	2	679	600					79
California	1	80	80					
Colorado	135	148,874	61,254	22,589				65,031
Kentucky	4	2,372		2,372				
Montana	22	37,504	1,466					36,039
New Mexico	29	44,760	20,047			9,148	7,086	8,478
North Dakota	18	17,419						17,419
Oklahoma	46	73,991	890					73,102
Oregon	3	5,411	538	4,874				
Pennsylvania	2	80			80			
Utah	204	279,772	187,993	50,221			28,108	13,450
Washington	2	521					241	280
Wyoming	105	228,559	104,578	4,440	1,324		1,840	116,355

NOTE: Details may not add to total due to rounding.

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Coal, Tar Sands, and Oil Shale, Automated Coal Lease Data System, September 30, 1981.

TABLE A-4

SURFACE ACREAGE OF LEASES, BY REGION AND BY SURFACE OWNERSHIP: SEPTEMBER 30, 1981

Region	Number of Leases	Total Acres	FEDERAL LANDS			Native American	State	Private
			BLM	FS	OTHER			
TOTAL	575	842,949	377,447	84,497	1,404	9,148	37,275	333,144
Central Appalachian	4	2,372		2,372				
Denver-Raton Mesa	9	3,886					40	3,847
Fort Union	21	23,235						23,235
Green River-Hams Fork	104	154,428	102,077	400	1,324		120	50,502
Northern Appalachian	2	80			80			
Powder River	77	165,796	14,615	3,760			1,720	145,681
San Juan River	27	44,721	20,048			9,148	7,046	8,477
Southern Appalachian	2	2,909						2,909
Uinta-Southwestern Utah	270	364,279	238,319	72,811			28,108	25,032
Western Interior	46	73,991	890					73,102
No Region	13	7,252	1,498	5,154			241	359

NOTE: Details may not add to total due to rounding.

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Coal, Tar Sands, and Oil Shale, Automated Coal Lease Data System, September 30, 1981.

TABLE A-5

NUMBER OF LEASES, ESTIMATED IN-PLACE RESERVES,
BY STATE: SEPTEMBER 30, 1981

State	Number of Leases	Total Reserve Base (million tons)
TOTAL	575	35,419
Colorado	135	5,732
Kentucky	4	9
Montana	22	3,843
New Mexico	29	901
North Dakota	18	345
Oklahoma	46	449
Utah	204	7,737
Wyoming	105	16,274
Other 1/	12	129

1/ Due to confidentiality requirements, an aggregate figure is given for all reserve data for states with less than three lessees. Other includes Alabama, Alaska, California, Oregon, Pennsylvania, and Washington.

NOTE: Details may not add to total due to rounding.

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Coal, Tar Sands, and Oil Shale, Automated Coal Lease Data System, September 30, 1981.

TABLE A-6

NUMBER OF LEASES, ESTIMATED IN-PLACE RESERVES,
BY REGION: SEPTEMBER 30, 1981

Region	Number of Leases	Total Reserve Base (million tons)
TOTAL	575	35,419
Appalachian [1/]	8	71
Denver-Raton Mesa	9	105
Fort Union	21	655
Green River-Hams Fork	104	7,147
Powder River	77	15,664
San Juan River	27	756
Uinta-Southwestern Utah	270	10,350
Western Interior	46	449
Other [1/]	13	222

[1/] Due to confidentiality requirements, an aggregate figure is given for all reserve data with less than three lessees.

NOTE: Details may not add to total due to rounding.

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Coal, Tar Sands, and Oil Shale, Automated Coal Lease Data System, September 30, 1981.

TABLE A-7

TOTAL UNITED STATES COAL PRODUCTION AND FEDERAL PRODUCTION,
BY STATE: CALENDAR YEAR 1980

State	Production in CY 1980	
	U.S. (thousand tons)	Federal (thousand tons)
TOTAL	829,700	69,092
Alabama	26,403	28
Alaska	791	0
Arizona	10,905	0
Arkansas	319	0
Colorado	18,846	9,391
Georgia	3	0
Illinois	62,543	0
Indiana	30,873	0
Iowa	559	0
Kansas	842	0
Kentucky	150,144	3
Maryland	3,760	0
Missouri	5,503	0
Montana	29,872	10,393
New Mexico	18,425	6,317
North Dakota [1/]	16,975	606
Ohio	39,394	0
Oklahoma	5,358	259
Pennsylvania	93,125	0
Tennessee	9,850	0
Texas [1/]	29,354	0
Utah	13,236	8,663
Virginia	41,009	0
Washington	5,140	0
West Virginia	121,584	0
Wyoming	94,887	33,434

[1/] Includes only lignite.

NOTE: Details may not add to total due to rounding.

SOURCE: Department of Energy, Energy Information Administration, Energy Data Reports, July 16, 1981, Department of the Interior, Geological Survey, Conservation Division, Eighth Summary - State County or OCS Zone, Lands & Products Accounting Statistics, Calendar Year 1980.

TABLE A-8

NUMBER OF PRODUCING LEASES AND PRODUCTION,
BY STATE: FISCAL YEAR 1981

State	Producing Leases		Production in FY 1981
	Number	Acreage	Tons
TOTAL	105	173,226	94,644,568
Colorado	28	25,321	11,451,283
Montana	10	23,455	15,402,089
New Mexico	4	10,031	8,872,863
North Dakota	2	3,600	200,274
Oklahoma	5	6,206	276,937
Utah	28	34,592	8,577,248
Wyoming	28	70,020	49,863,874

NOTE: Details may not add to total due to rounding. The statistics represent production and royalty reported during FY 1981 and adjustments made during FY 1981 for prior periods. The FY 1981 royalty management statistics may not represent actual production achieved in FY 1981 or the royalty accrued on that production due to adjustments for previous years. This data is unpublished.

SOURCE: U.S. Department of the Interior, Geological Survey, Conservation Division, Royalty Management Office.

TABLE A-9

NUMBER OF PRODUCING LEASES AND PRODUCTION,
BY REGION: FISCAL YEAR 1981

Region	Producing Leases		Production in FY 1981
	Number	Acreage	Tons
TOTAL	105	173,226	94,644,568
Fort Union	3	4,320	450,338
Green River-Hams Fork	28	56,482	18,547,000
Powder River	22	47,867	55,194,026
San Juan River	5	10,191	9,025,050
Western Interior	5	6,206	276,937
Uinta-Southwestern Utah	42	48,160	11,151,207

NOTE: The statistics represent production and royalty reported during FY 1981 and adjustments made during FY 1981 for prior periods. The FY 1981 royalty management statistics may not represent actual production achieved in FY 1981 or the royalty accrued on that production due to adjustments for previous years. The data is unpublished.

SOURCE: U.S. Department of the Interior, Geological Survey, Conservation Division, Royalty Management Office.

TABLE A-10

ROYALTY REVENUES FROM FEDERAL COAL LEASES,
BY STATE: 1965 to 1981

State	FY 1965	FY 1970	FY 1975	FY 1980	FY 1981
TOTAL	$777,551	$1,069,935	$4,857,423	$24,568,692	$40,280,418
Alabama	NA	106	24,394	31,669	0
Alaska	52,244	41,146	51,438	0	0
Colorado	150,405	303,405	364,035	7,115,564	11,952,875
Kentucky	36,193	NA	126,643	10,830	0
Montana	16,826	11,027	1,219,863	2,065,885	3,922,771
New Mexico	62,304	1,347	242,716	1,472,900	3,440,772
North Dakota	36,567	135,997	60,013	272,272	101,677
Oklahoma	23,695	54,053	43,199	826,942	1,009,820
Utah	271,375	299,547	456,480	3,968,073	5,094,133
Washington	NA	NA	18,851	0	0
Wyoming	125,790	222,805	2,249,791	8,804,557	14,758,370

NA: Not Available.

NOTE: Details may not add to total due to rounding. The statistics for FY 1981 represent production and royalty reported during FY 1981 and adjustments made during FY 1981 for prior periods. The FY 1981 royalty management statistics may not represent actual production achieved in FY 1981 on the royalty accrued on that production due to adjustment for previous years. This data is unpublished.

SOURCE: U.S. Department of the Interior, Geological Survey, Federal and Indian Lands Coal, Phosphate, Potash, Sodium, and Other Mineral Production, Royalty Income, and Related Statistics, June 1981, and FY 1980 and FY 1981 data is unpublished and is from Geological Survey, Conservation Division, Royalty Management Office.

TABLE A-11

LARGEST 15 FEDERAL COAL LESSEES RANKED
BY ACREAGE: SEPTEMBER 30, 1981

Lessee	Acreage	Number of Leases
Peabody Coal Co.	52,587	28
Consolidation Coal Co.	48,673	36
Kemmerer Coal Co.	30,254	26
El Paso Natural Gas Co.	27,659	16
Utah International Inc.	24,122	27
R.D. Bass, Trust Est.	20,700	1
U.S. Steel Corp.	18,930	19
Evans Coal Co.	17,806	11
Gulf Oil	16,349	14
Garland Coal & Mining	15,281	9
Sheridan Enterprises	15,089	7
Kaiser Steel Corp.	15,094	10
Black Butte Coal Co.	14,902	1
Decker Coal Co.	14,770	4
Dorchester Coal Co.	14,729	3

NOTE: The acreage and number of leases does include those leases that the lessee is related to or associated with indirectly.

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Automated Coal Lease Data System, September 30, 1981.

TABLE A-12

SURFACE ACREAGE OF PRLA's, BY STATE AND BY SURFACE OWNERSHIP: SEPTEMBER 30, 1981

State	Number of PRLA's	Total Acres	FEDERAL LANDS			Native American	State	Private
			BLM	FS	OTHER			
TOTAL	167	373,688	173,599	23,619	230	7,181	963	163,809
Alaska	3	7,680	7,680					
Colorado	28	52,022	6,674	1,203	40			44,103
Montana	4	14,673	9,917					4,756
New Mexico	26	75,509	55,229			6,101		14,180
Oklahoma	3	5,707						5,707
Utah	21	68,586	54,076	13,609			40	861
Wyoming 1/	82	149,511	40,023	8,807	190	1,080	923	94,202

1/ The figures for type of ownership in Wyoming do not add to total acreage due to incomplete data on Wyoming PRLA's.

NOTE: Details may not add to total due to rounding or incomplete data on Wyoming PRLA's.

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Coal, Tar Sands, and Oil Shale, Automated Coal Lease Data System, September 30, 1981.

TABLE A-13

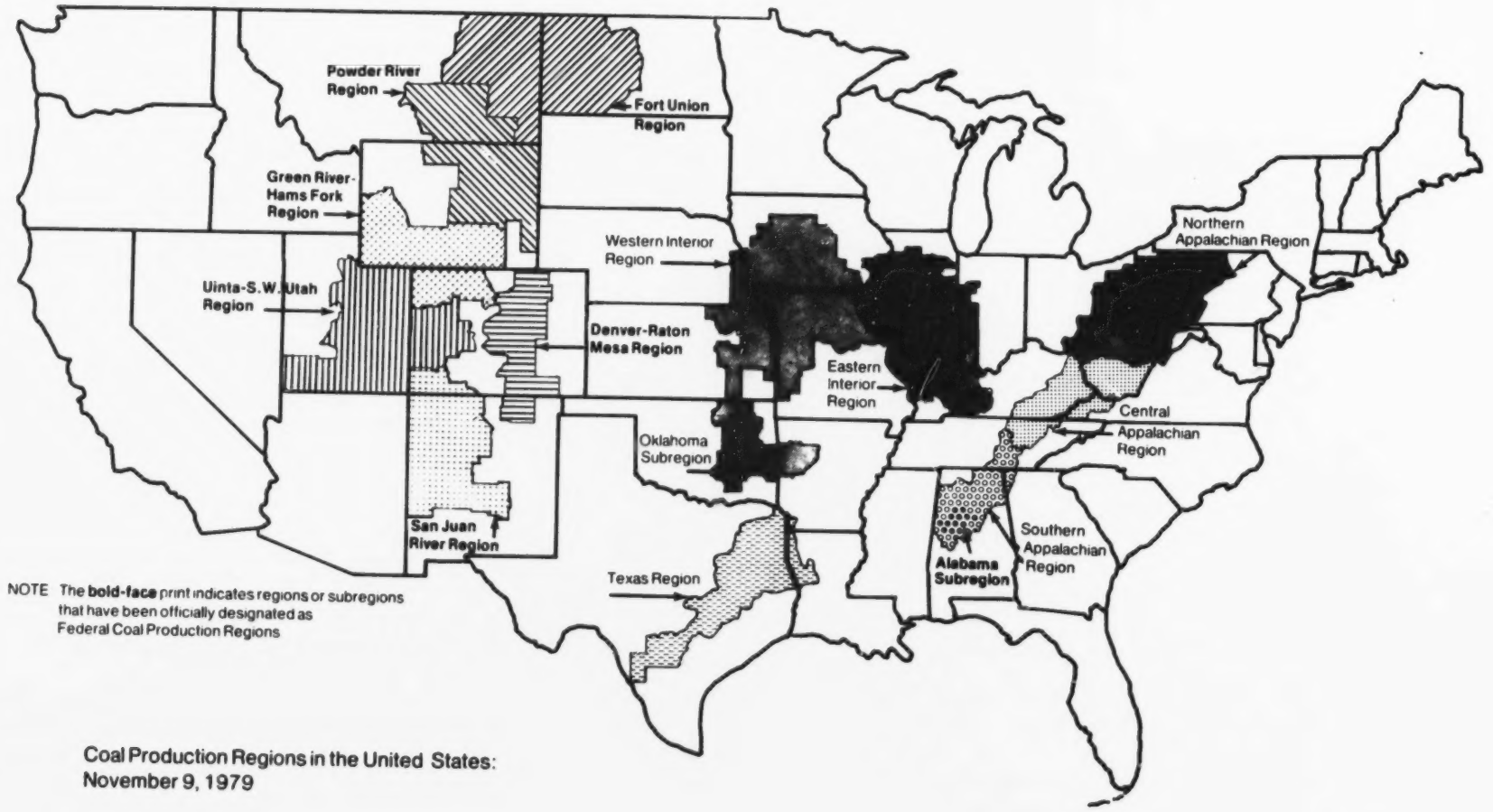
SURFACE ACREAGE OF PRLA's, BY REGION AND BY SURFACE OWNERSHIP: SEPTEMBER 30, 1981

Region	Number of PRLA's	Total Acres	FEDERAL LANDS			Native American	State	Private
			BLM	FS	OTHER			
Total	167	373,688	173,599	23,619	230	7,181	963	163,809
Denver-Raton Mesa	14	25,958	40					25,918
Fort Union	4	14,673	9,917					4,756
Green River-Hams Fork	27	70,291	31,598	2,413	230		883	35,126
Powder River [1/]	67	101,827	14,461	6,394		1,080	40	75,615
San Juan River	26	75,509	55,229			6,101		14,180
Uinta-Southwestern Utah	23	72,043	54,674	14,812			40	2,517
Western Interior	3	5,707						5,707
No Region	3	7,680	7,680					

[1/] The figures for type of ownership in the Powder River Region do not add to the total acreage due to incomplete data on Wyoming PRLA's.

NOTE: Details may not add to total due to rounding or incomplete data on PRLA's in Powder River Region.

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Coal, Tar Sands, and Oil Shale, Automated Coal Lease Data System, September 30, 1981.



NOTE The **bold-face** print indicates regions or subregions that have been officially designated as Federal Coal Production Regions

Coal Production Regions in the United States:
November 9, 1979

Appendix B

BEST DOCUMENT AVAILABLE

APPENDIX C

LAND USE PLANNING ACTIVITIES IN FISCAL YEAR 1981

LUP's UPDATED AND AMENDED IN FY 1981

Western Interior Federal Coal Region:

- Southeast Oklahoma MFP Amendment, New Mexico

Powder River Federal Coal Region:

- Western Powder River MFP Amendment, Wyoming
- Recluse MFP Amendment, Wyoming
- Thunder Basin National Grasslands Land-Use Plan Amendment, Wyoming, FS
- Powder River MFP Amendment, Montana

Uinta-Southwestern Utah Federal Coal Region:

- Price River MFP, Utah
- North Fork MFP Amendment, Colorado

San Juan River Federal Coal Region:

- Chaco-San Juan MFP Update, New Mexico

ON-GOING LUP EFFORTS IN FY 1981 AND ANTICIPATED COMPLETION DATES

Southern Appalachian Federal Coal Region:

- Alabama (Outside north-central Alabama), Eastern States Office, September 1983.

Fort Union Federal Coal Region:

- Jordan/North Rosebud and New Prairie MFP, Montana, September 1982
- McKenzie/Williams MFP, Montana, September 1983
- Southwest North Dakota MFP, Montana, September 1983

Green River-Hams Fork Federal Coal Region:

- Big Sandy MFP Update, Wyoming, November 30, 1982
- Salt Wells MFP Update, Wyoming, November 30, 1981
- Pioneer Trails MFP Update, Wyoming, February 15, 1982
- Overland MFP Update, Wyoming, April 15, 1982
- Divide MFP Update, Wyoming, April 15, 1982
- White River MFP Amendment, Colorado, January 04, 1982
- Kremmling RMP, Colorado, September 30, 1983
- Williams Fork MFP Amendment, Colorado, May 19, 1982

San Juan River Federal Coal Region:

- San Juan RMP, Colorado, September 1984

Uinta-Southwestern Utah Federal Coal Region:

- Grand RMP, Utah, September 1983 *
- Cedar/Beaver RMP, Utah, September 1984
- Glenwood Springs RMP, Colorado, September 1983
- Manti-LaSal National Forest, July 1983
- Fishlake National Forest, October 1983
- Dixie National Forest, October 1983

Western Interior Federal Coal Region:

- Southeast Oklahoma MFP Amendments, New Mexico, periodic for lease applications

APPENDIX D

REGIONAL COAL LEASE SALE SCHEDULE

	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter		
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY 1981				GR #1a			GR #1b		APP #1a	UI #1a		
FY 1982	GR #1c		APP #1b		UI #1b		PR #1	UI #1c				
FY 1983									FU #1			SJR #1
FY 1984			UI #2			GR #2			PR #2	APP #2		
FY 1985											GR #3	FU #2
FY 1986			UI #3							PR #3	SJR #2	

Federal Coal Regions

GR - Green River Hams Fork
UI - Uinta-Southwestern Utah
PR - Powder River
FU - Fort Union

APP - Southern Appalachian, Alabama Subregion
SJR - San Juan River
DR - Denver-Raton Mesa (first sale expected in FY 1987)

Lease Sale

1 or 1a - Initial first round lease sale
1b, 1c - First round follow-up sales
2 - Initial second round sale
3 - Initial third round sale

NOTE: The sale schedules during calendar years 1985 and 1986 have not been firmly designated in these specific months.

TABLE E-1

COAL PROGRAM TECHNICAL PUBLICATIONS

Reclamation Study Area Reports

Number & Year	Title	Available From	Status
1-75	Otter Creek, Montana	Denver Service Center Library	Reprinted
2-75	Hanna Basin, Wyoming	Wyoming State Office	Published
3-75	Taylor Creek, Colorado	Denver Service Center Library	09-15-81 reprint
4-75	Alton, Utah	Utah State Office	Published
5-76	Bisti, New Mexico	New Mexico State Office	Published
6-76	Foidel Creek, Colorado	Colorado State Office	Published
7-76	Red Rim, Wyoming	Wyoming State Office	Published
8-76	Bear Creek, Montana	Denver Service Center Library	Reprinted
9-76	Horse Nose Butte, North Dakota	Montana State Office	Reprinted
10-77	Beulah Trench, North Dakota	Montant State Office	Published
11-77	Pumpkin Creek, Montana	Montana State Office	10-01-81 printing
12-77	Hanging Woman, Montana	Montana State Office	Published
13-77	White Tail Butte, Wyoming	Wyoming State Office	Published
14-77	Potter Mountain, Wyoming	Wyoming State Office	Published
15-77	Henry Mountain, Utah	Utah State Office	Published
16-77	Emery, Utah	New Mexico State Office	Published
17-77	Kimbeto, New Mexico	Colorado State Office	09-01-81 printing
18-77	Fish Creek, Colorado	New Mexico State Office	10-01-81 draft
19-78	Ojo Encino, New Mexico	Colorado State Office	10-01-81 printing
20-78	Lay Creek, Colorado	Montana State Office	10-01-81 draft
21-78	Prairie Dog Creek, Montana	Montana State Office	12-15-81 final
29-78	Rattlesnake Butte, North Dakota	Colorado State Office	09-01-81 draft
26-79	McCallum, Colorado	New Mexico State Office	11-01-81 draft
27-79	Arkoma, Oklahoma	Eastern State Office	08-15-81 draft
28-79	Overburden Analysis, Alabama	Montana State Office	09-01-81 printing
29-79	North Beulah Study Area, North Dakota	Montana State Office	09-01-81 printing
30-79	Cook Mountain, Montana	Colorado State Office	09-01-81 draft
34-80	Collum Gulch, Colorado	Montana State Office	02-01-82 final print
36-80	Fattig Study Area, Montana		11-01-81 final

Number & Year	Title	Available From	Status
37-80	Garrison, North Dakota	Montana State Office	06-01-81 complete
38-80	Circle 1, Montana	Montana State Office	09-01-81 draft
39-80	Circle 2, Montana	Montana State Office	09-01-81 draft
40-80	Upper 13 Mile Creek, Montana	Montana State Office	09-01 81 draft
41-80	SW Glendive	Montana State Office	09-01-81 draft
42-80	Burns Creek, Montana	Montana State Office	09-01-81 draft
43-80	Williston Deposit	Montana State Office	09-01-81 draft
43-80	Beaver Creek Study Area	Montana State Office	09-01-81 draft

TABLE E-2

COAL PROGRAM TECHNICAL PUBLICATIONS

Technical Reports

Number & Year	Title	Available From	Status
23-76	Characterization Studies of Major Soils Found in Proposed Oil Shale and Coal Development Areas of Northwest Colorado	Special Studies, Denver Service Center (DSC)	Published
31-79	Evaluation of On-Going Mined-Land Reclamation of Selected Coal Mines in North Dakota, Montana, Wyoming, New Mexico, and Colorado	Special Studies, DSC	Cancelled
32-80	Snow Management Techniques for Mined-Land Reclamation	Special Studies, DSC	10-01-81 printing
33-80	Hydrologic Considerations in Coal Activity Planning	Special Studies, DSC	Published
45-80	Climatological Analysis for Mined-Land Reclamation	Special Studies, DSC	Published
51-80	Geomorphology: Its Role in Mined-Land Reclamation	Special Studies, DSC	10-01-81 printing
52-81	Water Quality Sampling and Analysis: Price, Muddy and San Rafael Basins, Utah (YA-512-CT9-65)	Utah State Office	Published

Number & Year	Title	Available From	Status
	1980 Annual Progress Report: Revegetation Studies on Disturbed Overburden, Alton Coal Field, Utah (UT-910-1A9-436)	Special Studies, DSC	Draft completed (no final to be printed)
	1980 Annual Progress Report: Revegetation Studies on Disturbed Overburden, Emery Coal Field, Utah (UT-910-1A9-436)	Special Studies, DSC	Draft completed (no final to be printed)

GLOSSARY

BLM	Bureau of Land Management
DEIS	Draft Environmental Impact Statement
DOE	Department of Energy
DOI	Department of the Interior
DOJ	Department of Justice
DSC	BLM Denver Service Center
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMRIA	Energy Minerals Rehabilitation Inventory and Analysis
EPA	Environmental Protection Agency
FCLAA	Federal Coal Leasing Amendments Act
FEIS	Final Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
FMV	Fair Market Value
FS	Forest Service (USDA)
FWS	Fish and Wildlife Service
FY 1981	Fiscal Year 1981 (October 1, 1980 to September 30, 1981)
GS	United States Geological Survey
KRCRA	Known Recoverable Coal Resource Area
LMU	Logical Mining Unit
LUP	Land Use Plan
MER	Maximum Economic Recovery
MFP	Management Framework Plan
NAWDEX	National Water Data Exchange System
NCRDS	National Coal Resources Data System
NEPA	National Environmental Policy Act
NPS	National Park Service
NRDC	Natural Resources Defense Council, Inc.
OSM	Office of Surface Mining Reclamation and Enforcement
PRLA	Preference Right Lease Application
RAM	Rapid Assessment Method
RCT	Regional Coal Team
RMP	Resource Management Plan
SBA	Small Business Administration
SID	Secretarial Issue Document
SMCRA	Surface Mining Control and Reclamation Act
SRA	State Regulatory Authority
SSA	Site-Specific Analysis
USDA	United States Department of Agriculture

* U.S. GOVERNMENT PRINTING OFFICE: 1982 368-782/680